



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--------------------|----------------------|---------------------|------------------|
| 10/595,014 | 04/25/2006 | Johnson Oyama | P18448-US2 | 1246 |
| 27045 ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024 | 7590 09/17/2008 | | | |
| EXAMINER | | | | |
| BATISTA, MARCOS | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 2617 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 09/17/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,014

Applicant(s)

OYAMA ET AL.

Examiner

MARCOS BATISTA

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6, 8, 10, 11, 15, 18, 20, 23, 27, 29, 30, 32, 34, 36, 37, 41, 43, 46, 49, 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims pending in the application are 1,3,4,6,8,10,11,15,18,20,23,27,29,30,32,34,36,37,41,43,46,49 and 53.

DETAILED ACTION

Art Unit- Location

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 53 is rejected under 35 U.S.C. 102(e) as being anticipated by Jiang et al. (US 20040114553 A1).

Consider claim 53, Jiang discloses a system for Mobile IP version 6 (MIPv6) hand-in within a CDMA framework said system comprising (see par. 0007 lines 1-4, 0055 lines 5-7): means for AP a Challenge Handshake Authentication Protocol (CHAP) authentication procedure between a mobile node in a visited network and an AAA server in a home network of the mobile node over an AAA infrastructure (see pars. 0061 lines 20-24, 0062 lines 1-8); wherein nodes in the visited network act as mere pass-through agents in the CHAP procedure (see fig. 3, pars. 0026 lines 1-7, 0056 lines 8-14).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 3, 4, 15, 18, 27, 29, 30, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill et al. (US 20040047348 A1), hereafter "O'Neill," in view of Jiang et al. (US 20040114553 A1), hereafter "Jiang."

Consider claim 1, O'Neill discloses a method of authentication and authorization support for Mobile IP version 6 (MIPv6) in a CDMA system, the method comprising the steps of (see **pars. 0047 lines 1-21, 0057 lines 4-14**): transferring, between a mobile node in a visited network and a home network of the mobile node, MIPv6-related authentication and authorization information (see **fig. 11, par. 0048 lines 1-8**).

O'Neill, however, does not particular refer to wherein the transferring step is performed in an authentication protocol; and wherein the transferring step is performed in an end-to-end procedure transparent to the visited network over an Authentication, Authorization, and Accountings (AAA) infrastructure.

Jiang, in analogous art, teaches transferring authentication and authorization information in an authentication protocol (see **pars. 0061 lines 20-24, 0062 lines 1-8**); and wherein the transferring is performed in an end-to-end procedure transparent to the visited network over an Authentication, Authorization, and Accountings (AAA) infrastructure (see **fig. 3, pars. 0026 lines 1-7, 0032 lines 1-12, 0056 lines 8-14**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of O'Neill and have it include wherein the transferring step is performed in an authentication protocol; and wherein the transferring step is performed in an end-to-end procedure transparent to the visited network over an Authentication, Authorization, and Accountings (AAA) infrastructure, as taught by Jiang. The motivation would have been in order to transfer data packet between a base station controller and a data packet network (see **par. 0003**).

Consider claim 3, O'Neill as modified by Jiang discloses the invention of claim 1. Jiang also teaches wherein the end-to-end procedure is executed between the mobile node and an AAA server in the home network, and nodes in the visited network act as mere pass-through agents in the end-to-end procedure (see fig. 3, pars. 0026 lines 1-7, 0032 lines 1-12). The motivation would have been in order to transfer data packet between a base station controller and a data packet network (see par. 0003).

Consider claim 4, O'Neill as modified by Jiang discloses the invention of claim 3. O'Neill also teaches wherein the MIPv6-related information is transferred in the authentication protocol between the mobile node and the AAA home network server via an internetworking access server located in the visited network (see fig. 11, [0048] – the access node **920** serves as an internetworking server located in the visited network and transfer authentication information from the AAA **905** and the home network or home agent **930**).

Consider claim 15, O'Neill as modified by Jiang discloses the invention of claim 1. Jiang also teaches wherein said method further comprises the step of performing, for the purpose of MIPv6 hand-in, CHAP authentication between the mobile node and the home network (see pars. 0061 lines 20-24, 0062 lines 1-8). The motivation would have been in order to transfer data packet between a base station controller and a data packet network (see par. 0003).

Consider claim 18, O'Neill as modified by Jiang discloses the invention of claim 1. O'Neill also teaches wherein the MIPv6-related information is transferred over the AAA

infrastructure for allocation of a home agent, for establishing a MIPv6 security association between the mobile node and the home agent and for establishing a binding for the mobile node in the home agent (see fig. 11, [0047], [0050]).

Consider claims 27, 29, 30, 41 and 43, these are system claims corresponding to method claims 1, 3, 4, 15 and 18. Therefore, they have been analyzed and rejected based upon the method claims 1, 3, 4, 15 and 18 respectively

8. Claims 6 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill (US 20040047348 A1), hereafter "O'Neill," in view of Jiang et al. (US 20040114553 A1), hereafter "Jiang," further in view of Lee et al. (US 20020105934 A1), hereafter "Lee1."

Consider claim 6, O'Neill as modified by Jiang discloses claim 4 above, but does not particular refer to wherein point-to-point communication between the mobile node and the internetworking access server is configured based on the CSD-PPP protocol.

Lee1 teaches a point-to-point communication between the mobile node and the internetworking access server is configured based on the CSD-PPP protocol (see abstract, fig. 5, [0038]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of O'Neill and have it include a point-to-point communication between the mobile node and the internetworking access server is configured based on the CSD-PPP protocol, as taught by Lee1. The motivation would have been in order to considerably reduce the overhead cost (see [0061]).

Consider claim 32, this is system claim corresponding to method claims 6. Therefore, it has been analyzed and rejected based upon the method claim 6 above.

9. Claims 20, 23, 46 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill (US 20040047348 A1), hereafter "O'Neill," in view of Jiang et al. (US 20040114553 A1), hereafter "Jiang," further in view of Lee et al. (US 20030099213 A1), hereafter "Lee2."

Consider claim 20, O'Neill as modified by Jiang discloses claim 4 above, but does not particular refer to wherein the internetworking access server offers the mobile node the possibility to use PPP or CSD-PPP by sending out a standard PPP/LCP packet and at least a PPPIEAP packet.

Lee2 teaches wherein the internetworking access server offers the mobile node the possibility to use PPP or CSD-PPP by sending out a standard PPP/LCP packet and at least a PPP/EAP packet (see [0026]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of O'Neill and have it include wherein the internetworking access server offers the mobile node the possibility to use PPP or CSD-PPP by sending out a standard PPP/LCP packet and at least a PPPIEAP packet, as taught by Lee2. The motivation would have been in order to provide a secure access to the Internet (see [0026]).

Consider claim 23, O'Neill as modified by Jiang and Lee2 discloses claim 4 above, but does not particular refer to wherein the internetworking access server also sends out a PPPICHP packet together with the PPP/LCP and PPP/EAP packets.

Lee2 teaches wherein the internetworking access server also sends out a PPPICHP packet together with the PPP/LCP and PPP/EAP packets (see [0026]). It would have been obvious to have modified O'Neill with the teaching of Lee2. The motivation would have been in order to provide a secure access to the Internet (see [0026]).

Consider claims 46 and 49, these are system claims corresponding to method claims 20 and 23. Therefore, they have been analyzed and rejected based upon the method claims 20 and 23 respectively.

10. Claims 8, 10, 11, 34, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill (US 20040047348 A1), hereafter "O'Neill," in view of Jiang et al. (US 20040114553 A1), hereafter "Jiang," further in view of Salowey et al. (US 7171555 B1), hereafter "Salowey."

Consider claim 8, O'Neill as modified by Jiang discloses claim 1 above, but does not particular refer to wherein the authentication protocol is an extended Extensible Authentication Protocol (EAP) and the MIPv6-related authentication and authorization information is incorporated as additional data in the EAP protocol stack.

Salowey teaches wherein the authentication protocol is an extended Extensible Authentication Protocol (EAP) and the MIPv6-related authentication and authorization

information is incorporated as additional data in the EAP protocol stack (see col. 6 lines 44-5, col. 7 lines 1-12).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of O'Neill and have it include wherein the authentication protocol is an extended Extensible Authentication Protocol (EAP) and the MIPv6-related authentication and authorization information is incorporated as additional data in the EAP protocol stack, as taught by Salowey. The motivation would have been in order to protect distribution of the credentials without initiating a new session or exchanging special-purpose keys (see col. 3 lines 35-39).

Consider claim 10, O'Neill as modified by Jiang and Salowey teaches claim 8. O'Neill, however, does not particular refer to wherein the MIPv6-related information is transferred in a generic container attribute available for any EAP method.

Salowey teaches wherein the MIPv6-related information is transferred in a generic container attribute available for any EAP method (see col. 9 lines 3-5, col. 7 lines 50-53).

It would have been obvious to have modified O'Neill with the teaching of Salowey. The motivation would have been in order to protect distribution of the credentials without initiating a new session or exchanging special-purpose keys (see col. 3 lines 35-39).

Consider claim 11, O'Neill as modified by Jiang and Salowey teaches claim 8. O'Neill, however, does not particular refer to wherein the MIPv6-related information is transferred in a method-specific generic container attribute of the method layer in the EAP protocol stack.

Salowey teaches wherein the MIPv6-related information is transferred in a method-specific generic container attribute of the method layer in the EAP protocol stack (see col. 8 lines 3-8). It would have been obvious to have modified O'Neill with the teaching of Salowey. The motivation would have been in order to protect distribution of the credentials without initiating a new session or exchanging special-purpose keys (see col. 3 lines 35-39).

Consider claims 34, 36 and 37, these are system claims corresponding to method claims 8, 10 and 11. Therefore, they have been analyzed and rejected based upon the method claims 8, 10 and 11 respectively.

Response to Argument

11. Applicant's arguments with respect to claims 1, 27 and 53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Art Unit: 2617

Marcos Batista

/M. B./

09/11/2008

/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617